UNITED STATES PATENT AND TRADEMARK OFFICE

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EXAMINER
DAILEY, THOMAS J

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

PTOL-90A (Rev. 04/07)

-- *The MAILING DATE of this communication appears on the cover sheet with the correspondence address* --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
 Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term.adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *16 April 2007*.

2a)☒ This action is **FINAL.** 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-31* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-6, 8-11, 13-15, 17, 18, 24, 26 and 28-31* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☒ All b)☐ Some * c)☐ None of:

        1.☒ Certified copies of the priority documents have been received.

        2.☐ Certified copies of the priority documents have been received in Application No. _____.

        3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____ .

5) ☐ Notice of Informal Patent Application

6) ☐ Other: _____.

DETAILED ACTION

1. Claims 1-31 are pending in this application.

2. Claims 7, 12, 16, 19-23, 25, and 27 were canceled by the amendment received April 16, 2007.

3. Claims 28-31 were added by the amendment.

4. Claims 1-6, 8-11, 13-15, 17-18, 24, 26, and 28-31 are being considered for evaluation in this office action.

Response to Arguments

5. The applicant has amended independent claims 1, 9, 15, and 24 to include the subject matter of respective previously dependent claims 7, 12, 16, and 25. The applicant argues that the reliance in the office action on Osanai et al (US Pub. No. 2003/0002075) for the subject matter of the claims 7, 12, 16, and 25 is contrary to the portion of the disclosure of Sistanizadeh et al (US Pat. 5,790,548) relied on in the office action, the rejection is incorrect. The applicant further argues because of this dichotomy in the subject matter to one of ordinary skill in the art at the time of the invention to which Sistanizadeh et al and Osanai et al are concerned, the examiner relied upon hindsight reasoning to combine the prior arts.

6. The examiner disagrees. In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight

reasoning, it must be recognized that any judgment on obviousness is in a sense

necessarily a reconstruction based upon hindsight reasoning. But so long as it

takes into account only knowledge which was within the level of ordinary skill at

the time the claimed invention was made, and does not include knowledge

gleaned only from the applicant's disclosure, such a reconstruction is proper.

See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971). In

response to applicant's argument that Osanai and Sistanizadeh are

nonanalogous arts, it has been held that a prior art reference must either be in

the field of applicant's endeavor or, if not, then be reasonably pertinent to the

particular problem with which the applicant was concerned, in order to be relied

upon as a basis for rejection of the claimed invention. See *In re Oetiker*, 977

F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992). In this case, the two arts are in

the applicant's field of endeavor, which is computer systems and more

particularly to computer networks that interconnect network nodes, such as

computers and computer peripherals (Specification, page 1, [002]). Sistanizadeh

relates to public and private access to on-line multimedia services (Sistanizadeh,

column 1, lines 5-7) and Osanai relates to monitoring a network image

processing apparatus (Osanai, [0002]).

7. The applicant further argues, with regards to claims 8, 20, and 27, that

Sistanizadeh and Dawes (US Pat. 6,411,997) are concerned with entirely

different objectives and the examiner relied upon hindsight reasoning to combine

the prior arts.

8. The examiner disagrees. In response to applicant's argument that the

examiner's conclusion of obviousness is based upon improper hindsight

reasoning, it must be recognized that any judgment on obviousness is in a sense

necessarily a reconstruction based upon hindsight reasoning. But so long as it

takes into account only knowledge which was within the level of ordinary skill at

the time the claimed invention was made, and does not include knowledge

gleaned only from the applicant's disclosure, such a reconstruction is proper.

See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971). In

response to applicant's argument that Sistanizadeh and Dawes are

nonanalogous arts, it has been held that a prior art reference must either be in

the field of applicant's endeavor or, if not, then be reasonably pertinent to the

particular problem with which the applicant was concerned, in order to be relied

upon as a basis for rejection of the claimed invention. See *In re Oetiker*, 977

F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992). In this case, the two arts are in

the applicant's field of endeavor, which is computer systems and more

particularly to computer networks that interconnect network nodes, such as

computers and computer peripherals (Specification, page 1, [002]). Sistanizadeh

relates to public and private access to on-line multimedia services (Sistanizadeh,

column 1, lines 5-7) and Dawes relates to determining the topology of a network

of objects, such as the physical topology of a network of data communications

devices (Dawes, column 1, lines 11-14).

9. The 35 U.S.C. 112 first and second paragraph rejections that follow were

necessitated by the amendments.

Claim Rejections - 35 USC § 112

10. The following is a quotation of the first and second paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

11. Claims 29 and 31 are rejected under 35 U.S.C. 112, first paragraph, as failing to

comply with the enablement requirement. The claim(s) contains subject matter

which was not described in the specification in such a way as to enable one

skilled in the art to which it pertains, or with which it is most nearly connected, to

make and/or use the invention.

12. Claims 29 and 31 recite, "the network server arrangement **simultaneously**

stores the identifier for each of the networked nodes as **a stack in first-in-first-**

out order." As recited, this is not enabled, as it is impossible to store identifiers

in first-in-first-out order if one is storing each identifier simultaneously, i.e. if

something is happening simultaneously how can it have an order.

13. Claims 2, 29, and 30 rejected under 35 U.S.C. 112, second paragraph, as being

indefinite for failing to particularly point out and distinctly claim the subject matter

which applicant regards as the invention.

14. Claim 2 depends from claim 1 and recites additional steps "(a)" (line 2) and "(b)"

(line 4). The parent claim 1 also has steps "(a)" (line 11) and "(b)" (line 12). This

makes the claims confusing, as letters are repeated for separate steps. If the

applicant intends to use letters to label steps in the method claims, they should

be consistent in the dependent claims as well to maintain clarity.

15. Claims 29 and 31 recite, "the network server arrangement **simultaneously**

stores the identifier for each of the networked nodes as **a stack in first-in-first-**

out order." As recited, it is unclear how the network server stores identifiers in

first-in-first-out order if the network server is storing each identifier

simultaneously, i.e. if something is happening simultaneously how can it have an

order.

16. Claim 30 recites, "from the network node to the network server arrangement **five**

the network." (line 6) It is unclear what the applicant intended this limitation to be

as this is an obvious typographical error.

Claim Rejections - 35 USC § 102

17. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

18. Claim 30 is rejected under 35 U.S.C. 102(b) as being anticipated by Sistanizadeh

et al. (US Pat. 5,790,548), hereafter "Sistanizadeh."

19. As to claim 30, Sistanizadeh discloses a method of discovering that a plurality of

network nodes have been connected to a computer network Including a network

server arrangement (Abstract), the method comprising, for each of the networked

nodes, the steps of:

responding to the establishment of the connection of the particular network

node to the network by transmitting an initial access request from the network

node (Fig. 7, label 710, with the DHCP Request reading on the "access request")

to the network server arrangement five (*via*) the network (Fig. 7, label 712 and

column 12, lines 8-14),

the network server arrangement responding to the initial access request by

(a) deriving a request comprising an identifier of the network node (Fig. 7,

label 714, with the DNS Update reading on the "a request", and column 12, lines

21-30, the IP address is the "identifier"),

(b) performing a discovery procedure of the network node by the discovery

server using the identifier (column 12, lines 21-30),

(c) simultaneously storing the identifier for each of the network nodes (column

12, lines 8-20).

Claim Rejections - 35 USC § 103

20. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as
set forth in section 102 of this title, if the differences between the subject matter sought to be
patented and the prior art are such that the subject matter as a whole would have been
obvious at the time the invention was made to a person having ordinary skill in the art to which
said subject matter pertains. Patentability shall not be negatived by the manner in which the
invention was made.

21. Claims 1-6, 9-11, 13-15, 17, 24, and 28-29 are rejected under 35 U.S.C. 103(a)

as being unpatentable over of Sistanizadeh in view of Osanai et al. (US Pub. No.

2003/0002075), hereafter "Osanai."

22. As to claim 1, Sistanizadeh discloses a method of discovering that a network

node has been connected to a computer network including a network server

arrangement, the method comprising the steps of:

responding to the establishment of the connection of the network node to the

network by transmitting an initial access request from the network node (Fig. 7,

label 710, with the DHCP Request reading on the "access request") to the

network server arrangement via the network (Fig. 7, label 712 and column 12,

lines 8-14);

the network server arrangement responding to the initial access request by

deriving a request comprising an identifier of the network node (Fig. 7,

label 714, with the DNS Update reading on the "a request"),

performing a discovery procedure of the network node by the discovery

server using the identifier (column 12, lines 21-30, the IP address is the

"identifier"),

responding to a subsequent access request received by the network

server arrangement from the same network node (Fig. 7, label 712, with the

DHCP Request reading on the "access request") by deriving a subsequent

discovery request in response to the subsequent access request (Fig. 7, label

712 and column 12, lines 21-30, with the DNS Update reading on the

"discovery request").

Sistanizadeh does not disclose:

storing an indication of the time of the initial access request transmitted by the

network node, and

transmitting the discovery request only if the subsequent access request is

separated by at least a predetermined amount of time from the time stamp.

However, Osanai discloses:

storing an indication of the time of the initial access request transmitted by a

network node ([0040], lines 1-15), and

transmitting a request only if the subsequent access request is separated by

at least a predetermined amount of time from the time stamp ([0040], lines 1-15).

Therefore it would have been obvious to one of ordinary skill in the art at the

time of the invention to combine the teachings of Sistanizadeh and Osanai in

order to optimize the time interval between requests thereby mitigating conflicts

and allowing the system to be more effective (Osanai [0011]).

23. As to claims 9, 15, and 24, they are rejected by the same rationale set forth in

claim 1's rejection.

24. As to claim 2, Sistanizadeh and Osanai disclose the invention substantially with

regard to the parent claim 1, and further disclose processing by the network

server arrangement, (a) the access request so the access request is selectively

accepted or refused (Sistanizadeh, column 12, lines 8-14) and (b) as a result of

the processing, by the network server arrangement generating the discovery

request (Sistanizadeh, Fig. 7, label 712, with the DNS Update reading on the

"discovery request") in response to the access request being accepted

(Sistanizadeh, column 12, lines 21-30).

25. As to claim 3, Sistanizadeh and Osanai disclose the invention substantially with

regard to claim 1, and further disclose the access request is a log on request

(Sistanizadeh, Fig. 7 and column 12, lines 8-14).

26. As to claim 4, Sistanizadeh and Osanai disclose the invention substantially with

regard to the parent claim 3, and further disclose the network server being a

domain controller (Sistanizadeh, Fig. 7, label 712, a DHCP server is a domain

controller).

27. As to claim 5, Sistanizadeh and Osanai disclose the invention substantially with

regard to the parent claim 1, and further disclose the access request is an

Internet protocol address request (Sistanizadeh, column 12, lines 8-14).

28. As to claim 6, Sistanizadeh and Osanai disclose the invention substantially with

regard to the parent claim 5, and further disclose the network server being a

dynamic host configuration protocol server (Sistanizadeh, Fig. 7, label 712).

29. As to claim 10, Sistanizadeh and Osanai disclose the invention substantially with regard to the parent claim 9, and further disclose the user device is a portable client computer (Sistanizadeh, Fig. 2, labels 48 or 42) and the access requests are log on request (Sistanizadeh, Fig. 7 and column 12, lines 8-14).

30. As to claim 11, Sistanizadeh and Osanai disclose the invention substantially with regard to the parent claim 9, and further disclose the user device is a computer peripheral (Sistanizadeh, Fig. 2, labels 48 or 42) and the access request is a log on request (Sistanizadeh, Fig. 7 and column 12, lines 8-14).

31. As to claim 13, Sistanizadeh and Osanai disclose the invention substantially with regard to the parent claim 9, and further disclose processing the access request by the network server (Sistanizadeh, column 12, lines 8-14) and generating the discovery request by the network server (Sistanizadeh, Fig. 7, label 712, with the DNS Update reading on the "discovery request") after acceptance of the access request (Sistanizadeh, column 12, lines 21-30).

32. As to claim 14, Sistanizadeh and Osanai disclose the invention substantially with regard to the parent claim 9, and further disclose temporarily coupling the network node to the computer network by a docking station (Sistanizadeh, Fig. 2,

labels 48 or 42, in this embodiment the node is a laptop and this will inherently be temporarily coupled to the network via a docking station).

33. As to claim 17, Sistanizadeh and Osanai disclose the invention substantially with regard to the parent claim 15, and further disclose the access request is time stamped (Osanai, [0040], lines 1-15).

34. As to claim 28, Sistanizadeh and Osanai disclose the invention substantially with regard to the parent claim 1, and further disclose the method is performed for a plurality of access requests from a plurality of networked nodes, the network server arrangement simultaneously storing the identifier for each of the network nodes (Sistanizadeh, column 12, lines 8-20).

35. As to claim 29, Sistanizadeh and Osanai disclose the invention substantially with regard to the parent claim 28, and but do not explicitly disclose the network server arrangement simultaneously stores the identifier for each of the networked nodes as a stack in first-in-first-out order. Sistanizadeh's does not go into specifics as to how the identifiers are stored, just that they are.

Although Sistanizadeh does not explicitly suggest the use of a first-in-first-out order (FIFO) stack, Official Notice is taken (MPEP 2144.01) that using a FIFO stack as a means to store data was a well-known practice at the time of the

applicant's invention was made, which is deployed to more easily manage

memory operations. Thus it would have been obvious to one of ordinary skill in

the art at the time of the invention to take advantage of a known standard to

modify the teachings of Sistanizadeh and Osanai in order to achieve such

benefits.

36. Claims 18 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable

over of Sistanizadeh et al (US Pat. 5,790,548), hereafter "Sistanizadeh" in view

of Dawes et al. (US Pat. 6,411,997), hereafter "Dawes."

37. As to claim 18, Sistanizadeh discloses a storage medium or device storing a

computer program for performing a discovery procedure, the computer program

being arranged for causing a server arrangement of a computer in a network to

perform steps including:

   receiving a discovery request from a network server (Fig. 7, label 712, with

the DNS Update reading on the "discovery request"), the discovery request

comprising an identifier of a network node (column 12, lines 21-30, the IP

address is the "identifier"),

   performing a discovery procedure for the network node using the identifier

(column 12, lines 21-30),

   storing identifiers of network nodes in a buffer memory (column 12, lines 8-

14), and

Sistanizadeh does not disclose performing the discovery procedure by polling the network node.

However, Dawes discloses performing a discovery procedure by polling a network node (column 12, lines 1-24).

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to combine the teachings of Sistanizadeh and Dawes in order to allow for the discovery server to contain information about the network and thereby allowing for easier management of the network.

38. As to claim 26, Sistanizadeh discloses a discovery server module (Fig. 7, label 714) comprising:

a memory component for storing an IP address received as part of a discovery request from a dynamic host configuration protocol server module (Fig. 7, label 714 and column 12, lines 21-30, with the DNS Update reading on the "discovery request"), and

a discovery program component for performing a discovery procedure of a network node being identified by the IP address stored in the memory component in response to the discovery request (column 12, lines 21-30).

Sistanizadeh does not disclose polling the network node to discover at least one of network topology, network node type, network node status and network node configuration information.

However, Dawes discloses polling the network node to discover at least one of network topology, network node type, network node status and network node configuration information (column 12, lines 1-24, "total traffic measured so far" is network node status).

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to combine the teachings of Sistanizadeh and Dawes in order to allow for the discovery server to contain information about the network and thereby allowing for easier management of the network.

39. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over of Sistanizadeh and Osanai as applied to claim 1 in further view of Dawes.

40. As to claim 8, Sistanizadeh does not disclose polling the network node to discover at least one of network topology, network node type, network node status and network node configuration information.

Dawes discloses polling the network node to discover at least one of network topology, network node type, network node status and network node

configuration information (column 12, lines 1-24, "total traffic measured so far" is

network node status).

Therefore it would have been obvious to one of ordinary skill in the art at the

time of the invention to combine the teachings of Sistanizadeh and Dawes in

order to allow for the discovery server to contain information about the network

and thereby allowing for easier management of the network.

41. Claim 31 is rejected under 35 U.S.C. 103(a) as being unpatentable over of

Sistanizadeh, as applied to claim 30, in view of what was well known in the art at

the time of the invention.

42. As to claim 31, Sistanizadeh discloses the invention substantially with regard to

the parent claim 30, and but do not explicitly disclose the network server

arrangement simultaneously stores the identifier for each of the networked nodes

as a stack in first-in-first-out order. Sistanizadeh's does not go into specifics as

to how the identifiers are stored, just that they are.

Although Sistanizadeh does not explicitly suggest the use of a first-in-first-out

order (FIFO) stack, Official Notice is taken (MPEP 2144.01) that using a FIFO

stack as a means to store data was a well-known practice at the time of the

applicant's invention was made, which is deployed to more easily manage

memory operations. Thus it would have been obvious to one of ordinary skill in

the art at the time of the invention to take advantage of a known standard to

modify the teachings of Sistanizadeh and Osanai in order to achieve such

benefits.

Conclusion

43. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time

    policy as set forth in 37 CFR 1.136(a).

44. A shortened statutory period for reply to this final action is set to expire THREE

    MONTHS from the mailing date of this action. In the event a first reply is filed

    within TWO MONTHS of the mailing date of this final action and the advisory

    action is not mailed until after the end of the THREE-MONTH shortened statutory

    period, then the shortened statutory period will expire on the date the advisory

    action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be

    calculated from the mailing date of the advisory action. In no event, however, will

    the statutory period for reply expire later than SIX MONTHS from the mailing

    date of this final action.

45. Any inquiry concerning this communication or earlier communications from the

    examiner should be directed to Thomas J. Dailey whose telephone number is

    571-270-1246. The examiner can normally be reached on Monday thru Friday;
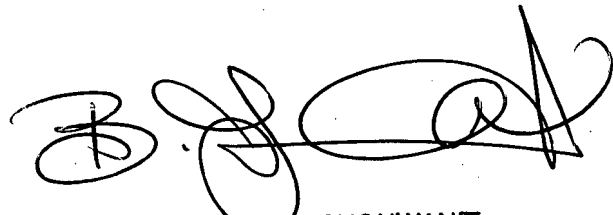
    9:00am - 5:00pm.

46. If attempts to reach the examiner by telephone are unsuccessful, the examiner's

    supervisor, Bunjob Jaroenchonwanit can be reached on 571-272-3913. The fax

phone number for the organization where this application or proceeding is

assigned is 571-273-8300.

47. Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR

only. For more information about the PAIR system, see http://pair-

direct.uspto.gov. Should you have questions on access to the Private PAIR

system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-

free). If you would like assistance from a USPTO Customer Service

Representative or access to the automated information system, call 800-786-

9199 (IN USA OR CANADA) or 571-272-1000.

TJD
7/5/2007

BUNJOB JAROENCHONWANIT
SUPERVISORY PATENT EXAMINER

7/5/7